Remarks

This responds to the Office Action mailed on June 11, 2008.

Claims 1-2, 4 and 9 are amended. Applicant respectfully submits that no new matter was added by way of amendment. Claims 1-9 are pending.

The 35 U.S.C. § 112(2) Rejection

Claim 4 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 was further rejected under 35 U.S.C § 112, second paragraph, as lacking clear antecedent basis. Applicant respectfully submits that the amendments to claim 4 renders the rejections of claim 4 moot and respectfully requests the rejection under § 112(2) be withdrawn.

The 35 U.SC. § 102 Rejection

Claims 1-3 and 5-6 were rejected under 35 U.S.C. § 102(b) for anticipation by Mosbach (U.S. Patent No. 6,489,418 B1). This rejection is respectfully traversed.

"Anticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983).

Claim 1, as amended, recites: "A method of producing a molecularly-imprinted material, comprising: (a) synthesizing a peptide corresponding to an epitope of a target peptide or protein on a disposable surface modified support to produce a support surface-attached peptide; (b) providing a selected monomer mixture; (c) contacting said monomer mixture with said support surface-attached peptide; (d) initiating polymerisation of at least one crosslinking reaction; (e) dissolving or degrading said support surface-attached peptide and said support; and (f) obtaining said molecularly imprinted material."

However, Mosbach does not disclose the use of a peptide corresponding to an epitope of a target peptide or protein. Thus, the claims are not anticipated by Mosbach.

Therefore, Applicant respectfully requests withdrawal of the § 102(b) rejection.

The 35 U.S.C. § 103 Rejection

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mosbach, as applied to claims 1-3, 5 and 6, *supra*. This rejection is respectfully traversed.

As discussed above, claim 1, as amended, recites: "A method of producing a molecularly-imprinted material, comprising: (a) synthesizing a peptide corresponding to an epitope of a target peptide or protein on a disposable surface modified support to produce a support surface-attached peptide; (b) providing a selected monomer mixture; (c) contacting said monomer mixture with said support surface-attached peptide; (d) initiating polymerisation of at least one crosslinking reaction; (e) dissolving or degrading said support surface-attached peptide and said support; and (f) obtaining said molecularly imprinted material."

Furthermore, Mosbach only discloses the use of the entire target protein, namely insulin or trypsin, being used as the template. By using such an attachment, Mosbach is unable to control which portion of the protein is actually templated since the entire protein is available for interaction with monomers. Thus, in the Mosbach method, the interaction of monomers with a specific part of the protein sequence, e.g., a portion corresponding to an epitope of a target peptide or protein, cannot be controlled.

The claims, as amended herein, related to a template being a specific, identifiable epitope of a target peptide or protein. Mosbach does not disclose or suggest the use of a template differing from the target protein. Nor does Mosbach disclose or suggest the use of a peptide corresponding to an epitope of a target peptide or protein.

To clarify Applicant's previous statement regarding the use of Mosbach's invention being costly to implement, this relates to the use of a native protein target molecule as a template. Pure proteins, which may need to be produced by recombinant DNA methods, are inherently expensive, prohibitively so if such a method is to be used for large scale production of template polymers. By only using a short peptide corresponding to an epitope of the target peptide or protein, where said peptide in some circumstances may be a di-, tri- or tetra-peptide, the use of a large, costly template is avoided.

As Mosbach discloses the target protein itself (insulin in Example 4, trypsin in Example 3) is used as a template, a further drawback is that not all targets are commercially available nor possible to prepare synthetically. The present invention allows for the preparation of molecularly imprinted material which by using a template being a peptide corresponding to an epitope of the target polypeptide or protein makes it possible to bind macromolecules such as peptides, oligopeptides, polypeptides, proteins, nucleic acids, oligonucleotides, polynucleotides, saccharides, oligosaccharides, and polysaccharides that would not be possible by conventional methods, for example, those disclosed by Mosbach.

Furthermore, to clarify the remarks in the response dated July 6, 2005, Applicant did not admit that the peptides, support or monomers are not patentably distinct. Rather, Applicant stated that with regards to the peptides, monomers, and support, while those compounds/compositions may be patentably distinct as compounds/compositions, within the context of the method claims, it is not necessary to argue about their actual composition at this time, e.g., specific sequence, in light of the method claims. Thus, claim 1 is patentable regardless of the specific, actual sequence of the epitope of a target peptide or protein. Additionally, Applicant would like to point out that "maintaining" is very different from "conceding," and the language in question was not used in conjunction with the subject matter of claims 5 and 6 (support and monomer mixtures, respectively).

Therefore, Applicant respectfully requests withdrawal of the § 103(a) rejection.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6905 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date Sept. 11, 2008

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of September 2008.

Patricia A. Hultman

Name

Signature